

REMARKS

Applicants respectfully acknowledge receipt of the Final Office Action mailed September 7, 2005.

In the Final Office Action, the Examiner: (1) rejected claims 1-4, 8-17, and 21-27 under 35 U.S.C. § 103(a) as being unpatentable over *Ueda* (U.S. Patent No. 6,122,009) in view of *Ikeda* (U.S. Patent No. 5,783,815); (2) rejected claims 5-7, 18-20, 28, and 30-37 under 35 U.S.C. § 103(a) as being unpatentable over *Ueda* in view of *Ikeda*, and further in view of *Toyoda et al.* (U.S. Pub. No. 2001/0012073); and (3) rejected claims 29 and 38 under 35 U.S.C. § 103(a) as being unpatentable over *Ueda* in view of *Ikeda* in view of *Toyoda*, and further in view of *Basista et al.* (U.S. Patent No. 4,451,124).

By this Amendment After Final, Applicants amend claims 14, 27, 28, and 37, and cancel claims 1-13 without prejudice or disclaimer. Claims 14-38 remain pending. Of these claims, claims 14, 28, and 37 are independent.

The originally-filed specification, claims, abstract, and drawings fully support the amendments to claims 14, 27, 28, and 37. No new matter has been introduced.

Based on the foregoing amendments, Applicants traverse the rejections above and respectfully request reconsideration for at least the reasons that follow.

I. 35 U.S.C. § 103(a) REJECTION - *Ueda v. Ikeda*

Claims 1-4, 8-17, and 21-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ueda* in view of *Ikeda*. Applicants respectfully disagree with the Examiner's arguments and conclusions and submit that amended independent claim 14 patentably distinguishes over *Ueda* and *Ikeda* at least for the reasons described below.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element recited in the claims. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Each of the three requirements, moreover, must "be found in the prior art, and not be based on applicant's disclosure." See M.P.E.P. §2143, 8th ed., February 2003.

Ueda discloses an image pickup apparatus including a package 2A (which structures the housing of holder 2) bonded to a substrate 1 with a filler 20, a CCD bare chip 12 disposed on the substrate 1, a lens portion 10 including an image forming lens 4, and leg portions 11 contacting a top and side surface of CCD bare chip 12. (*Ueda*, Fig. 6 and col. 8, ll. 4-5 and 36-52).

However, as admitted by the Examiner, *Ueda* is silent with respect to "a plurality of contact surfaces...arranged on a ring-shaped zone in contact with contact positions located on the peripheral surface between an edge of the peripheral surface and an edge of the photo-electrically converting section." (*Office Action*, p. 3, ll. 7-9). Additionally, *Ueda* does not teach determining a position between a lens section and a photoelectrically converting section of an image pickup element in a direction perpendicular to an optical axis by mounting a lens frame on a base board, as required by Applicants' independent claim 14 (emphases added).

As defined in the dictionary, “on” is used to indicate “a position over and in contact with that which supports from beneath.” (*Merriam-Webster*, 2003). As illustrated in Fig. 6 of *Ueda*, package 2A is not mounted on substrate 1, as filler 20 fills a gap in between package 2A and substrate 1 and prevents package 2A from directly contacting substrate 1 (emphases added). Conversely, Figs. 1 and 2 of the present invention illustrate the lens frame 4 mounted on and directly contacting the base board PC.

Accordingly, with regard to independent claim 14, *Ueda* fails to teach or suggest the claimed combination including, *inter alia*:

“wherein the position between the lens section and the photoelectrically converting section of the image pickup element in a direction perpendicular to the optical axis is determined by mounting the lens frame on the base board and by retaining the optical member with the lens frame.” (emphasis added).

In order to cure the deficiencies of *Ueda*, the Examiner relies on *Ikeda* at least for its asserted disclosure of “contact portions (23, 23, and 24, 24)...arranged in a ring-shaped zone in contact with contact portions located on a peripheral surface between an edge of the peripheral surface and an edge of the photo-electrically converting section (3).” (*Office Action*, p. 3, ll. 16-18). Applicants note, however, that with respect to independent claim 14, *Ikeda* does not teach or suggest, among other things, the claimed combination including, *inter alia*:

“wherein the position between the lens section and the photoelectrically converting section of the image pickup element in a direction perpendicular to the optical axis is determined by mounting the lens frame on the base board and by retaining the optical member with the lens frame.” (emphasis added).

Rather, *Ikeda* discloses a light receiving device including a printed circuit board 1, IC chips 2, lens fitting member 5, fitting legs 6, and a lens 7. (*Ikeda*, Fig. 2 and col. 3, ll. 49-65).

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness, wherein “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” See M.P.E.P. §§ 2142, 2143, and 2143.03. Accordingly, independent claim 14, and claims 15-27 that depend from claim 14, are patentable over *Ueda* and *Ikeda*. Additionally, with respect to claims 1-4 and 8-13, the Examiner’s rejection has been rendered moot in view of the cancellation of the claims. Applicants therefore request that the rejection of claims 1-4, 8-17, and 21-27 under 35 U.S.C. § 103(a) be withdrawn and claims 14-17 and 21-27 be allowed.

II. 35 U.S.C. § 103(a) REJECTION - *Ueda v. Ikeda v. Toyoda*

Claims 5-7, 18-20, 28, and 30-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ueda* in view of *Ikeda*, and further in view of *Toyoda*. Applicants respectfully disagree with the Examiner’s arguments and conclusions and submit that amended independent claims 28 and 37 patentably distinguish over *Ueda*, *Ikeda*, and *Toyoda* at least for the reasons described below.

As discussed above, *Ueda* discloses an image pickup apparatus including a package 2A (which structures the housing of holder 2) bonded to a substrate 1 with a filler 20, a CCD bare chip 12 disposed on the substrate 1, a lens portion 10 including an image forming lens 4, and leg portions 11 contacting the top and side surfaces of CCD bare chip 12. (*Ueda*, Fig. 6 and col. 8, ll. 4-5, 36-52). *Ikeda* discloses a light receiving

device including a printed circuit board 1, IC chips 2, lens fitting member 5, fitting legs 6, and a lens 7. (*Ikeda*, Fig. 2 and col. 3, ll. 49-65).

However, as admitted by the Examiner, “*Ueda* fails to teach wherein a plurality of contact surfaces are arranged on a ring-shaped zone in contact with contact portions located on the peripheral surface between an edge of the peripheral surface and an edge of the photo-electrically converting section...[and] *Ueda* in view of *Ikeda* fails to teach ‘an elastic member to press the optical member toward the image pickup element with an elastic force in an optical axis direction’.” (*Office Action*, p. 7, ll. 1-3 and 21-23). Additionally, *Ueda* in view of *Ikeda* does not teach determining a position between a lens section and a photoelectrically converting section of an image pickup element in a direction perpendicular to an optical axis by mounting a lens frame on a base board, as required by Applicants’ independent claims 28 and 37 (emphases added). Accordingly, with regard to independent claim 28, *Ueda* in view of *Ikeda* fails to teach or suggest the claimed combination including, *inter alia*:

“an elastic member to press the optical member toward the image pickup element with an elastic force...[and] wherein the position between the lens section and the photoelectrically converting section of the image pickup element in a direction perpendicular to the optical axis is determined by mounting the lens frame on the base board and by retaining the optical member with the lens frame.” (emphasis added).

Similarly, with respect to independent claim 37, it is also clear that *Ueda* in view of *Ikeda* does not teach or suggest each and every element, including, *inter alia*:

“wherein the position between the lens section and the photoelectrically converting section of the image pickup element in a direction perpendicular to the optical axis is determined by mounting the lens frame on the base board

and by retaining the optical member with the lens frame.”
(emphasis added).

In order to cure the deficiencies of *Ueda* and *Ikeda*, the Examiner relies on *Toyoda* for its asserted disclosure of “an elastic member 110 (figure 8) for absorbing the play of the holder (Paragraph 0003).” (*Office Action*, p. 9, ll. 20-21). Applicants note, however, that with respect to independent claims 28 and 37, *Toyoda* does not teach or suggest, among other things, the claimed combination including, *inter alia*:

“wherein the position between the lens section and the photoelectrically converting section of the image pickup element in a direction perpendicular to the optical axis is determined by mounting the lens frame on the base board and by retaining the optical member with the lens frame.”
(emphasis added).

The Examiner has therefore not met at least one of the essential criteria for establishing a *prima facie* case of obviousness, wherein “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Accordingly, independent claims 28 and 37, claims 29-36 that depend from claim 28, and claim 38 that depends from claim 37, are patentable over *Ueda*, *Ikeda*, and *Toyoda*. Additionally, with respect to claims 5-7, the Examiner’s rejection has been rendered moot in view of the cancellation of the claims, and with respect to claims 18-20, the claims are allowable at least due to their dependence from independent claim 14 above. Applicants therefore request that the rejection of claims 5-7, 18-20, 28, and 30-37 under 35 U.S.C. § 103(a) be withdrawn and claims 18-20, 28, and 30-37 be allowed.

III. CONCLUSION

Applicants respectfully submit that independent claims 14, 28, and 37 are in condition for allowance. In addition, claims 15-26, 29-36, and 38 are in condition for

allowance at least due to their dependence from independent claims 14, 28, and 37, respectively.

The Final Office Action contains characterizations of the claims and the related art with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicants decline to subscribe to any statement or characterization in the Final Office Action.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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